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Synopsis

The health and health inequalities impact of a place-based community wealth initiative, a mixed-methods study

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Abstract

Background: Regional economic disparities in the United Kingdom lead to large differences in health. Previous attempts to address this issue have had limited success. Community Wealth Building is an economic strategy that aims to address these inequalities by redirecting wealth back into the local economy and increasing community control over the economy. The City of Preston initiated a Community Wealth Building strategy in 2012. We investigate the health impact of this approach in Preston up to 2019, a period during which their strategy largely focused on progressive procurement and the adoption of the Living Wage by employers within Preston.

Methods: We estimate the impact of Community Wealth Building in Preston on mental health problems as measured by the Small Area Mental Health Index and its constituent components (antidepressants, depression diagnoses and mental health-related hospital attendances), self-reported life satisfaction, wages, employment and the number of non-profit enterprises. We use matching and difference-in-differences analysis to compare changes in outcomes in Preston before and after the intervention with changes in the outcomes in comparison areas. We use data on invoices and contracts issued by local authorities to compare procurement by Preston City Council with other similar local authorities, assessing the impact of local procurement on employment, wages and the cost of contracts. Finally, we use a combination of interviews and workshops to understand the process of change that has taken place in Preston and what has helped or hindered this.

Results: We found that, in Preston, the introduction of Community Wealth Building was associated with a reduction in mental health problems (−0.11 reduction in Small Area Mental Health Index, 95% confidence interval −0.16 to −0.06) alongside improvements in life satisfaction (0.06, 95% confidence interval 0.01 to 1.3), wages (£38 per week, 95% confidence interval £6.8 to £62.1), employment (4.1%, 95% confidence interval 2.3% to 5.8%) and a growth in non-profit enterprises (additional 20 enterprises 95% confidence interval 6 to 50). These economic improvements tended to be greatest among more disadvantaged groups, reducing inequalities. Preston City Council was much more likely to procure services from local suppliers compared to other similar local authorities, and this practice is likely to have contributed to these economic benefits. We found no evidence that procuring locally increased costs. Stakeholders in Preston highlighted that economic pathways to health impact were the most developed particularly in relation to procurement policy, while the community pathways to impact were less developed. Lack of widespread public involvement and engagement with smaller Voluntary, Community, Faith and Social Enterprise organisations in

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Preston had arguably limited the potential impact of Community Wealth Building in Preston. Despite this, appreciation for the approach and its aims remains strong.

Conclusion: Community Wealth Building in Preston has led to economic gains that disproportionately benefited less advantaged groups, and this led to improvements in mental health and well-being. This seems to have been largely driven by changes in procurement practices of anchor institutions alongside policies to improve working conditions – such as the Living Wage. Future development should aim to shift the balance toward bottom-up civic engagement, which will help enhance sustainability of the approach.

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Introduction

The UK experiences some of the largest spatial health inequalities of any country in Europe, with people living in poorer areas dying on average 9 years younger and living for 19 more years in poor health than more affluent areas.[1] Although there have been multiple place-based initiatives over decades that have sought to address these inequalities, they have met with limited success.[2–4]

Community Wealth Building (CWB) represents an innovative place-based approach to addressing inequalities. CWB comprises multiple components, often led by coalitions of anchor institutions – large public or not-for profit organisations, such as the NHS, local authorities (LAs) and universities – rooted in the locality. These institutions aim to promote economic inclusion and well-being within a place through:

1. changing procurement policies to support the development of local supply chains
2. supporting the development of local enterprises (co-operatives, social enterprises, charities and small businesses) that are more accountable and responsive to the local population
3. investing local wealth, such as local government pension funds, into the local economy
4. improving recruitment and employment conditions within anchor institutions and their suppliers
5. maximising socially productive use of land and property owned by anchor institutions.

Community Wealth Building could influence health through multiple pathways. Firstly, by procuring more services from the local economy and promoting quality local recruitment and employment policies throughout the supply chain, anchor institutions could both increase jobs in the local economy and improve wages and working conditions. These are both important determinants of health.[5–7] Increasingly, notions of social value are informing procurement and contracting processes, further supporting impact in the social realm, which is potentially linked to health outcomes. Secondly, the promotion of social enterprises such as co-operatives may also improve working conditions and be more responsive to needs.[8–10] Thirdly, by increasing democratic engagement in the economy and enhancing wider civic engagement, CWB may also increase peoples' sense of control, which is associated with improved health outcomes.[5–7] Finally, CWB may promote a positive narrative of place, counteracting the stigma often associated with disadvantaged places such as Preston. This may have positive population mental health benefits.[11,12] It is also possible that prioritising procurement from the local economy has negative impacts compared to more competitive national and international tendering of services. For example, favouring less efficient local enterprises may lead to reduced value for money or poorer services.

While the relationship between health and the economy has long been recognised, there is very little evidence indicating the public health benefits of alternative place-based economic strategies.[13] Modelling evidence from the USA found that introduction of a local living wage was predicted to increase life expectancy,[14] and work in the UK found that increases in minimum wages improved mental health.[15] A recent study found that a policy of devolution of some central government powers to regional government was associated with improvements in life expectancy, although it was unclear whether this was due to the economic impacts of this policy or changes in the delivery of public services.[16] A recent evidence review found that winning public procurement contracts can help local businesses to access finance and stimulate innovation, but it found no studies that assessed the impact of local public procurement strategies on employment, wages or well-being.[17]

The city of Preston, a relatively deprived city, with a population of 140,000 people in North West England,[18] has led the way in developing a CWB approach and there is considerable interest from policy-makers in utilising this to address the underlying economic differences between places that drive health inequalities.[1,19,20] While there

was some evidence that socioeconomic deprivation has improved more in Preston, since the CWB started, than in other similar areas,[21] we did not know whether these improvements were causally related to the CWB or the impact of the CWB on health or health inequalities.

Work on CWB in Preston started in 2012, with Preston City Council becoming the first LA in the north of England to become accredited as a Living Wage Employer by the Living Wage Foundation, which sets a minimum wage standard that accredited employers agree to pay.[22] In 2013, Preston City Council and Centre for Local Economic Strategies (CLES) conducted analysis, showing that only 5% (£38M) of anchor institution spend was spent with organisations based in Preston.[23] Through a series of activities with officials and procurement leads, including running workshops to identify the behaviours and patterns which influenced procurement, the anchor institutions agreed to utilise their influenceable spend for CWB. This led to a shift in their spending towards local and socially responsible suppliers. When the spend analysis was repeated in 2017, it found that spend of anchor institutions retained within Preston had increased to £112M.[23] For this study, we take 2015 as the start date of the intervention, as this is the point from which there had been some change in Procurement that could realistically have economic and health effects. Work started in 2017 to support the development of local worker owned businesses, with the establishment of Preston Cooperative Development Network[24] and the funding of local worker-owned businesses. Latterly, these developments have included the establishment of the co-operatively organised Preston Cooperative Education Centre.

A crucial question for places such as Preston is whether their CWB economic strategy has enabled it to support economic development that promotes health and well-being and to decrease inequalities. We did not know whether the magnitude and nature of the changes in Preston were sufficient to bring about population health impacts. This study, therefore, aimed to investigate whether mental health outcomes, well-being and economic outcomes improved more in Preston after CWB was introduced compared to other similar areas. We then aimed to investigate the distribution of these impacts within Preston and the nature and potential benefits and costs of local procurement, the main component of CWB in Preston during this period. Using interviews and focus groups with stakeholders, we explored the pathways which CWB had the potential to influence health and well-being and focused on the extent to which a culture of community participation had been built, reflecting on enablers and impediments for translating rhetoric of community participation into enduring action and impact.

Objectives

The aims of this study were to evaluate the health, social and economic impact of the CWB in Preston and to draw out learning for the development and implementation of future of CWB. The objectives were to:

1. investigate the impact of the Preston CWB on social, economic and health outcomes and how they differ by socioeconomic status
2. assess additional costs associated with implementing the CWB though changes in procurement practices and whether these costs outweigh the benefits
3. increase our understanding of the process of change within Preston initiated by the CWB and the pathways to changes in outcomes
4. draw out policy, practice and research implications for future CWBs so that they maximise their health and well-being benefits.

Changes from protocol

Due to the constraints of completing this work during a pandemic, some parts of the planned work could not be completed and additional analysis has also been included, which goes beyond that included in the original protocol. Due to the pandemic affecting data collections and key outcomes, we limited the analysis of health and social outcomes to the pre-pandemic period (up to 2019). We had originally planned analysis to include the pandemic period. However, data on our main outcome [Small Area Mental Health Index (SAMHI)] was not available and other data were affected by the disruption of health facilities during the pandemic, so it was not possible to complete this analysis. The economic evaluation could not be completed entirely as planned. The original plan was to audit in detail contracts issued by anchor institutions in Preston to contracts for similar services in other LAs. However, due to the pressure organisations were under during the pandemic, it was not possible to get this level of information. Instead, we sourced publicly available data on contracts and invoices from all LAs in England to provide an analysis estimating the impact of local procurement by local governments in the costs of contracts as well as on local employment and wages.

We initially aimed to use microdata from the secure access version of the Annual Population Survey (APS) to estimate differences in impact within Preston on life satisfaction, wages and employment by various equality dimensions (ethnicity, disability and educational level). However, we were only able to complete this analysis for employment and not the other two outcomes. For life satisfaction and wages, the sample available for analysis was too small to complete this analysis. There were several reasons for this. Firstly, response rates for the APS had reduced more

than we predicted.[25] Secondly, only 47% of respondents to the APS provided valid personal well-being responses because these questions must be answered in person by respondents over the age of 16 years.[26] This meant that, for life satisfaction, there were only 92 respondents from Preston in 2019 with a valid response. The data on wages were even more limiting. Unsurprisingly, information on wages was only available for people in work, but for this group, only 60% provided a valid response, leaving only 66 respondents from Preston with valid wage data in 2019. These small samples caused unresolvable complications when attempting to balance covariates between intervention and comparison groups and made the planned subgroup analysis for these two outcomes impossible. We were, however, able to conduct our planned analysis for the employment outcome, as the sample size for this was sufficient, as it can include proxy responses and item response rates are high.

Methods

The CWB in Preston is a 'natural experiment'. By 'natural experiment', we mean 'Events, interventions and policies that are not under the control of the researchers, but which are amenable to research using the variation in exposure that they generate to analyse their impact'.[27] CWB is a complex intervention involving the mobilisation of multiple actors across various sectors and no aspect of the CWB is under the control of the researchers. This presents two challenges for deriving evidence from evaluating the CWB in Preston. Firstly, assessing the causal impact on economic, social and health outcomes of an initiative that has not been implemented as a controlled trial, and secondly, understanding the critical components of change and their relation to context in order to indicate how lessons learnt in Preston could be applied in other contexts. We address these challenges through two work packages. The first uses quasi-experimental methods to identify impacts across a series of outcomes relating to the likely pathways of impacts, while the second aims to 'unpack the complexity' analysing the dynamics of change that have given rise to these impacts. The detailed methods and findings from this work are available through six linked papers given in *Box 1*.

Box 1 Papers

Paper 1. Rose TC, Daras K, Manley J, McKeown M, Halliday E, Goodwin TL, *et al*. The mental health and wellbeing impact of a Community Wealth Building Programme in England: a difference-in-differences study. *Lancet Public Health* 2023;**8**:e403–10. https://doi.org/10.1016/S2468-2667(23)00059-2

Paper 2. Rose TC, Daras K, McKeown M, Goodwin TL, Manley J, Barr B. Understanding the differential effects on employment of a Community Wealth Building Programme in England: a difference-in-differences study. *J Epidemiol Community Health* 2025. https://doi.org/10.1136/jech-2024-223499

Paper 3. Rose TC, McKeown M, Daras K, Goodwin TL, Manley J, Ahmed R, *et al*. Relationships between local public spending, employment and wages within local authorities in England – a longitudinal ecological analysis. *NIHR Open Res* 2025;**5**:89 https://doi.org/10.3310/nihropenres.14069.1

Paper 4. Ahmed R, Rose TC, Hollingsworth B, O'Sullivan V, Barr B. Local government procurement costs and Community Wealth Building initiatives in England. *Ann Public Coop Econ* 2026. https://doi.org/10.1111/apce.70028

Paper 5. Halliday E, Prinos I, Manley J, McKeown M, Goodwin TL, Barr B. How could Community Wealth Building address health inequalities? A qualitative study of stakeholder perspectives. *SSRN* 2025. https://doi.org/10.2139/ssrn.5378105

Paper 6. McKeown M, Manley J, Prinos I, Halliday E, Goodwin TL, Rose TC, *et al*. The organisational mainstreaming of community wealth building. *SSRN* 2024. http://dx.doi.org/10.2139/ssrn.4900630

The methods applied in each of these are outlined in brief below.

Assessing the impact of Preston Community Wealth Building on health, social and economic outcomes (papers 1 and 2)

Our primary outcome was a place-based measure of population mental health – the SAMHI. The SAMHI is a composite annual measure of population mental health that we have developed for each Lower Super Output Area (LSOA) in England. The data and methods used to compile the index are available through our open data portal – the Place-based Longitudinal Data Resource (https://pldr.org/dataset/2noyv/small-area-mental-health-index-samhi). The SAMHI combines data on mental health from multiple routine sources into a single index. To investigate which of these components were associated with any impact of the intervention, we included the subcomponents as secondary outcomes. These were: (1) antidepressant prescribing [average daily quantity (ADQ)/person]; (2) people aged 18+ years, with a diagnosis of depression in primary care (per 1000 population) and (3) mental health-related hospital attendance rate (emergency and elective combined with accident and emergency attendances for self-harm).[28]

In this LSOA-level analysis, we first match the 86 LSOAs that cover the entire population of Preston on a 5 : 1 basis with 430 comparator LSOAs from other areas in the North and Midlands of England that have not implemented CWB. This provides a total sample size of 4644 LSOA-years for analysis. CLES is working on CWB

within several areas across England, which were excluded from our analysis. We used propensity score[29] matching to ensure that these control areas had similar observed characteristics to the Preston LSOAs in the time period before the start date for the intervention (2011–5). We then used difference-in-differences methods to estimate the effect of the CWB programme in Preston, calculated as the difference between the change in the outcomes in the Preston areas and the change in the outcomes in the comparator areas. This differences-in-differences approach uses a comparison both within and between areas – accounting for secular trends in our outcomes and unobserved time invariant differences between areas that could confound findings.[28]

Additional outcomes were only available for LAs. We used annual data on mean life satisfaction scores as measured by the Office for National Statistics (ONS) using the APS. The measure is derived from survey respondents' answers to the question 'Overall, how satisfied are you with your life nowadays?', where 0 is 'not at all satisfied' and 10 is 'completely satisfied'. To investigate economic changes associated with Preston's CWB programme, we used the employment rate of 16- to 64-year-olds, and median wages derived from the APS, and Annual Survey of Hours and Earnings, respectively. We additionally also investigate impact on wages at the 20th–80th percentiles as CWB-related policies in Preston targeted low wages – for example, Living Wage policies that have been introduced across anchor institutions. To measure the expansion of the social economy, we utilise data on business counts available for LAs from the ONS to estimate the annual number of non-profit or mutual organisations as a share of all business units.[30]

For our analysis of outcomes using LA-level data, there was only one intervention unit, that is Preston. We therefore use the synthetic control approach developed by Brodersen *et al.*[31] The synthetic controls were calculated using Bayesian structural time series based on weighted combinations of the control areas. Controls for this analysis were defined as all lower-tier LAs in the North or Midlands that have a population between 90,000 and 250,000, which are within the 25% most deprived LAs in England and are not already working with CLES on developing CWB programmes. This gave 16 control area LAs.[28]

Additionally, we analysed the differential impact of CWB on employment within subgroups of the population within Preston using individual-level microdata from the APS.[32] For this subgroup analysis, we used difference-in-differences methods comparing the APS respondents in Preston to the change in outcomes for the sample in the 16 control area LAs as defined above. Entropy balancing[33,34] was used to reweigh the intervention and comparison groups to achieve balance on a number of covariates.[35] A weighted linear regression model, with an intervention group by pre/post period interaction term was then used to estimate the effect of the introduction of CWB on employment. We performed subgroup analysis to investigate whether there were differential effects on employment by subgroups defined by ethnic group, education level and self-reported health conditions/illnesses lasting ≥ 12 months that affect the kind or amount of paid work that can be done.[32]

Investigating the economics of local procurement (papers 3 and 4)

Community Wealth Building does not primarily involve investment of new funds but rather maximising the social and economic value of existing resources. Traditional health economic evaluation is therefore not relevant. The main component of the CWB approach implemented during the period of the evaluation was changes to procurement practice by Anchor institutions. Specifically, this involved adapting procurement policies to increase the share of spending that goes to the local economy.[36] The aim of this is to support the development of local supply chains, maximising social benefits and promoting economic inclusion within communities.[37]

In papers 3 and 4, we utilised a novel data set, including invoicing and contracting data from all lower-tier LAs in England from 2015 to 2023, compiled by Tussell Ltd.[38] from publicly available data. Initially, we provide descriptive analysis comparing the proportion of spend by Preston City Council, that is, with local suppliers a group of similar lower-tier LAs. This indicates whether procurement practice in Preston was actually different from that in other areas during this time. While Preston City Council is only one of the anchor institutions involved in CWB in Preston, and not the largest, comparable data were not available on other anchor institutions. As Preston City Council led the CWB, it provides an exemplar of the practice that was being encouraged across Preston during this period. We then provide a comparison of the contracts issued after 2015 by Preston City Council and other lower-tier LAs comparing the characteristics of the local and non-local suppliers that were awarded these contracts and the costs of the contracts.[32,39]

We then conducted two analyses using data from all lower-tier LAs across England. Firstly, we estimated the effect of increased local procurement on employment and wages in the local economy using linear fixed-effects panel regression models, with employment rate of those aged 16–64 years,[40] median weekly wages and wages at

the 20th percentile as outcomes, and expenditure on local suppliers as the exposure.[40] Invoices where the supplier address was provided were used to calculate the value of spend that went to local suppliers, for each LA per year. LA suppliers with registered addresses that fell within the administrative boundary of said LA were defined as local suppliers. This enables an estimate of the direct economic benefits of local procurement. Secondly, we investigate whether the cost of contracts awarded to local suppliers differ for similar services when compared to those awarded to suppliers outside the local area. As we are comparing local to non-local suppliers in this analysis, we use a broader definition of local suppliers as those being located in the same Nomenclature of Territorial Units for Statistics 2 (NUTS2) region as the contracting LA, for example, the same county or group of counties. Using an instrumental, variable, two-stage least squares model to account for endogeneity, with percentage of invoices historically paid by the contracting authority to local suppliers as an instrument, we estimated the difference in costs of similar contracts awarded to local and non-local suppliers. This gave an indication as to whether local procurement, on average, costs more or less than procurement from further afield.[32,39]

Understanding the mechanisms of change (papers 5 and 6)

To explore stakeholders' views on the role of CWB in improving health and well-being in Preston and experiences of embedding CWB within organisations, we conducted 62 qualitative, semistructured interviews, lasting from 45 minutes to 1 hour. We additionally conducted two participatory workshops exploring experiences and understandings of CWB and specific views on potential pathways to addressing health inequalities. We also had the opportunity to regularly consult and liaise with a standing patient and public involvement and engagement group and held a number of set-piece public engagement events, including two workshops nearing the end of the study where participating individuals (n = 27) offered their views on CWB and gave feedback on provisional findings. Interviewees were purposefully selected to represent those with senior or strategic roles from a range of organisations and sectors. This included representation from local government, NHS, voluntary/charitable, education and housing sectors. All the interviews were carried out online using Microsoft Teams (Microsoft Corporation, Redmond, WA, USA) and data were audio-recorded and transcribed. The anonymised data were then subject to thematic analysis to draw out key themes and topics.[41,42] Then, a more focused analysis of data was conducted related to health pathways (paper 5) and the embedding of CWB within organisations (paper 6). The analysis reported in paper 5 was informed by place-determinant frameworks,[43,44] with an equity lens also applied to the analysis.[45,46] This supported, for example, a consideration of health equity objectives underpinning CWB, the nature of targeting and entry points for intervening in relation to social determinants of health. Aspects of quality for such qualitative research, for example trustworthiness and credibility, were tested through the workshops above and via internal meetings with the core research team.[47]

Results

The impact of Preston Community Wealth Building on health, social and economic outcomes

Figure 1 shows the trends in the SAMHI in Preston and the control areas between 2011 and 2019. Trends in the outcomes in Preston were very similar to the control areas before 2015. Following the introduction of CWB, the SAMHI increases to a lesser extent in Preston relative to the control areas. Investigating antidepressant prescribing, depression diagnoses and mental health-related hospital attendances separately, the difference in this trend in Preston compared to the control group seems to be because of a lower increase in antidepressant prescribing and depression diagnoses (see *Appendix 1*).

Figure 2 shows analysis using LA-level data, indicating how life satisfaction, wages, employment and the number of non-profit enterprises have changed in Preston after 2015 compared to what would have been expected, given trends in these outcomes in other similar areas.

Table 1 shows the results from the difference-in-difference and synthetic control analyses for all the outcomes using aggregate LSOA (SAMHI, antidepressants and depression diagnosis) and LA-level data (Life satisfaction, wages, employment and non-profit enterprises). This indicates that the SAMHI reduced by 0.11 [95% confidence interval (CI) 0.06 to 0.16] relative to the control group. This can be interpreted as a reduction of 0.11 standard deviations. This was largely due to reduced antidepressant prescribing and depression prevalence in Preston relative to the control group. The analysis indicates that the introduction of the CWB programme was associated with a reduction in antidepressant prescribing of 1.3 ADQs/person (95% CI 0.72 to 1.78) in Preston, equivalent to a 3% reduction compared to what would have been expected in the absence of the programme. Depression prevalence among adults decreased by 2.4 per 1000 population (95% CI 0.42 to 4.46) in Preston relative to the control group, equivalent to a 2% reduction in relative terms. The introduction of

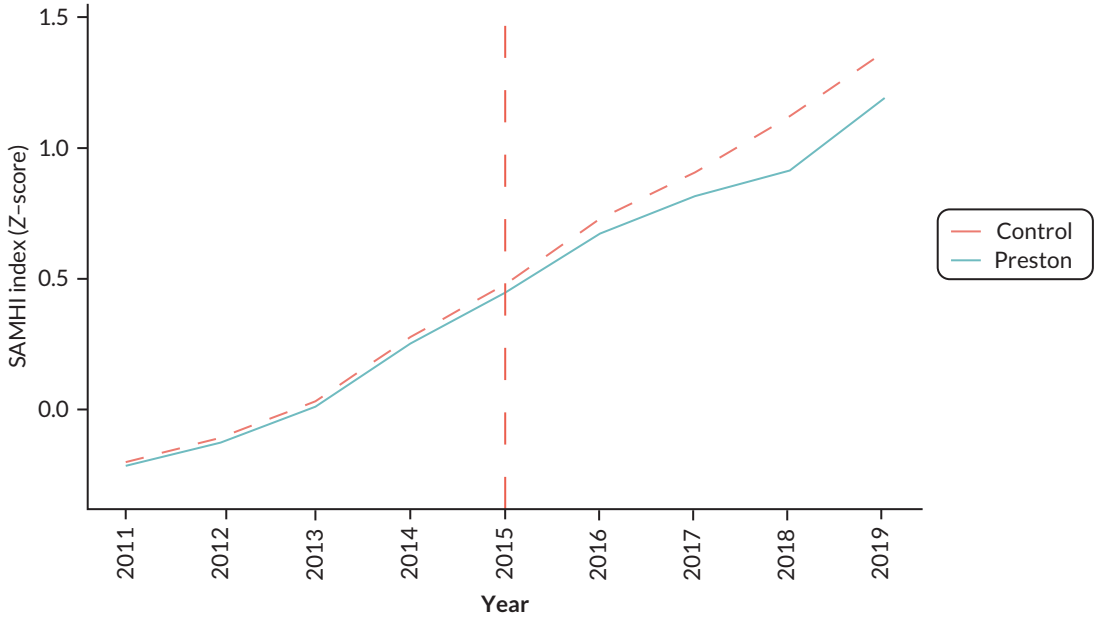

FIGURE 1 Trends from 2011 to 2019 in SAMHI in Preston and the control areas before and after the intervention. Shaded areas around the lines represent the 95% CIs.

CWB was not statistically significantly associated with a change in mental health-related hospital attendances.

For the outcomes available at the LA level, we see an improvement after 2015 compared to the synthetic counterfactual, with CWB estimated to have led to a 0.6 point increase in life satisfaction score, equivalent to a 9% relative improvement [95% credible interval (CrI) 0% to 20%], a £36 per week increase in median wages, which is a 10% relative improvement (95% CrI 2% to 19%). There was also a 5 percentage point increase in employment, which did not reach statistical significance at the 5% level in this analysis (see below), equivalent to a 10% relative increase (95% CrI −5% to 24%). The non-profit sector grew more in Preston during this period compared to other similar areas, increasing by 20 enterprises relative to the synthetic control, a 6% relative increase (95% Cr I 1.7% to 16%).[28]

The *p*-value for the LA level outcomes (life satisfaction, wages, employment and non-profits) is based on a comparison of the actual values of the outcomes in Preston to the posterior distribution of the outcome that would be expected in the absence of the intervention. The tail-area probability is the probability under the calculated posterior that the response is at least as extreme, relative to the expected value, as the one observed.

When the analysis was stratified by the level of deprivation of areas in Preston, for the antidepressant prescribing outcome, we see a similar effect in the least and most deprived areas. The programme appeared to be associated with a greater reduction in depression prevalence in the most deprived areas within Preston.[28] *Figure 3* shows the results from repeating the wage analysis separately for wages at the 20th, 25th, 30th, 40th, 60th, 70th and 80th percentiles. This gives an indication of the effect of CWB on the wage distribution. These indicate a greater impact on low wages than on higher wages. CWB was associated with a 20% increase in wages for those at the bottom of the wage distribution (20th percentile), compared to a 5% increase in wages for people on higher wages (80th percentile), indicating CWB was associated with a reduction in wage inequality.

Investigating the impact of CWB on employment using the individual level of microdata from the APS, we observed a similar magnitude of effect as when using aggregate LA level data (see *Table 1*). The difference-in-differences analysis using individual-level survey data indicated that the introduction of Preston's CWB programme was associated with a statistically significant increase in the employment rate of 4.1% (95% CI 2.4% to 5.7%) among people living in Preston, compared to what would have been expected in the absence of the intervention.[48] This gives us a more precise estimate as it is based on 95,476 individual survey responses rather than the 153 LA-years of observation used in the synthetic control analysis.

When the analysis was stratified by ethnic groups, we see a slightly greater increase in the employment rate associated with the introduction of CWB for Black and

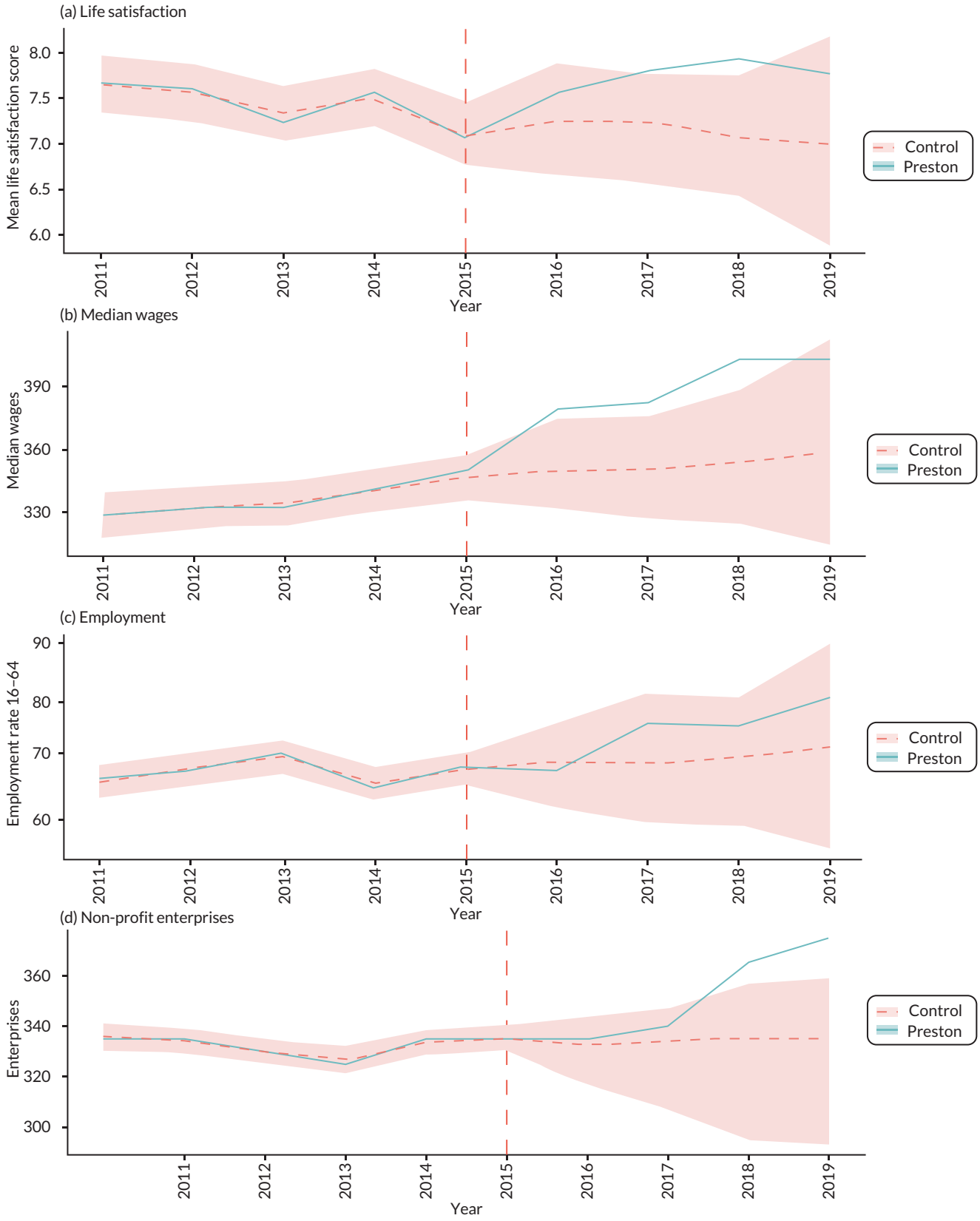

FIGURE 2 Trend in (a) life satisfaction, (b) median wages (c) employment and (d) the number of non-profit enterprises in Preston (green lines) from 2011 to 2019, and synthetic counterfactual controls modelled using Bayesian structural time series (orange dashed lines) and 95% CrIs (orange shaded areas). Reproduced with permission from Rose *et al.*[28] This is an Open Access article distributed in accordance with the terms of the Creative Commons Attribution (CC BY 4.0) licence, which permits others to distribute, remix, adapt and build upon this work, for commercial use, provided the original work is properly cited. See: https://creativecommons.org/licenses/by/4.0/. The figure includes minor additions and formatting changes to the original text.

TABLE 1 Estimates indicating the change in the mental health outcomes, life satisfaction, employment, wages and non-profit organisations in Preston before (2011–5) and after (2016–9) the start of the CWB programme when compared to the change in these outcomes between the same time periods in the control areas

Outcomes	Absolute effect on outcomes (95% CI/CrI)		*p*
SAMHI	−0.11	(−0.16 to −0.06)	< 0.001
Antidepressant prescribing (ADQs/person)	−1.25	(−1.78 to −0.72)	< 0.001
Adults with a diagnosis of depression (per 1000 population)	−2.44	(−4.46 to −0.42)	0.018
Mental health-related hospital attendances (per 1000 population)	0.66	(−1.32 to 2.64)	0.512
Life satisfaction score	0.6	(0.0 to 1.3)	0.025
Median wages (£/week)	38.3	(6.8 to 62.1)	0.014
Employment rate of 16- to 64-year-olds (%)	4.7	(−4.2 to 14.6)	0.097
Non-profit enterprises (number)	19.6	(5.93 to 50.1)	0.012

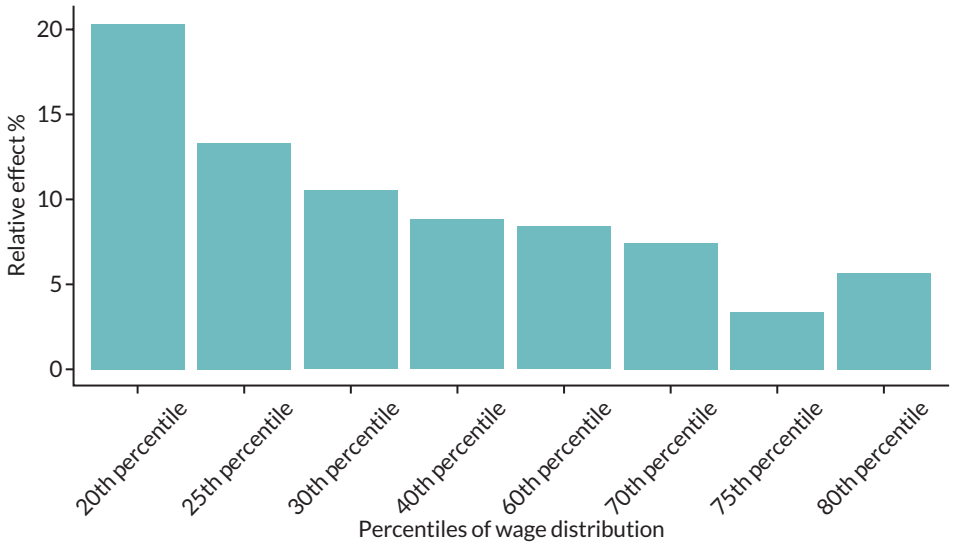

FIGURE 3 Estimated relative impact of introduction of CWB on wages at each percentile in Preston.

TABLE 2 Estimates of the effect of the intervention on the employment rate outcome from the difference-in-difference regression models stratified by ethnic groups, presence of long-term health problems and education level

	Absolute effect on employment rate of 16- to 64-year-olds (%)	95% CI	*p*
Ethnic group (ethnic minority groups)	5.9	(0.4 to 11.3)	0.036
Ethnic group (White)	3.6	(1.6 to 5.7)	0.002
Long-term health problem affecting amount of paid work	16.4	(13.4 to 19.7)	< 0.001
Long-term health problem affecting kind of paid work	22.1	(15.3 to 28)	< 0.001
No long-term health problems	2.9	(1.6 to 4.2)	< 0.001
Education (none or secondary)	5	(3.1 to 6.9)	< 0.001
Education (degree or tertiary)	0.1	(−0.8 to 1)	0.797

minority ethnic (ethnic minority groups) groups compared to White ethnic groups (*Table 2*). Additionally, there was a greater increase in the employment rate associated with the introduction of CWB for those with a limiting long-term health problem compared to those without any long-term health problems and for those without a university education compared to those with.[48]

Investigating the economics of local procurement

Figure 4 shows the proportion of expenditure by Preston City Council that was with suppliers located within the LA area, compared to a group of other similar lower-tier LAs. The proportion of spend with local suppliers in Preston is consistently higher during this period. On average, Preston City Council spent 34% (95% CI 20% to 47%) more with local suppliers compared to other similar lower-tier LAs.

Table 3 shows the characteristics of contracts issued to local and non-local (outside the LAs' NUTS2 region) between 2016 and 2023, for Preston, the comparator group of similar lower-tier LAs and for all other lower-tier LAs in England. In general, contracts issued to local suppliers tended to be of lower cost, than those awarded to non-local suppliers, 60% lower in Preston and 32% lower in other lower-tier LAs. There was less of a difference in the comparator LAs. The mean cost per month of the contract was also lower in Preston and other lower-tier LAs, but it was actually 45% higher in the comparator LAs. Contract duration was similar for local and non-local contracts in all three groups. In Preston, however, this was mostly driven by one local contract with 'Community Gateway Association' that was 144 months long. Excluding this, the average contract length for local suppliers in Preston was around 14 months. Local suppliers tended to be smaller organisations than non-local suppliers. They were more likely to be small- or medium-sized enterprises (SMEs), have fewer employees and lower turnover. On average, local suppliers made fewer profits. This may reflect the fact that local contracts are more likely to be with non-profit charitable organisations. Half of the local contracts in Preston were with charities, while none of the non-local contracts were with charitable organisations. Suppliers of local contracts also on average exhibit a lower average credit score compared to non-local suppliers.

Figure 5 shows the mean value per contract month of local and non-local contracts across all lower-tier LAs in England stratified by Standard Industrial Sector of the supplier. In general, across sectors, local contracts have a lower cost, except for financial and insurance activities, and to a smaller extent, information and communication services.

Table 4 shows estimates of the difference in cost per month of local compared to non-local contracts using data from all lower-tier LAs in England, after controlling for supplier sector, Gross Value Added for the supplier sector in the local economy, income deprivation, median wages, employment rate, population size, region and ONS rural–urban classification. Firstly, we estimated this using a simple linear regression (ordinary least squares) and then as decisions about whether to procure locally or from further afield are likely to be endogenous (i.e. influenced by the nature of the contract and/or local economy), we

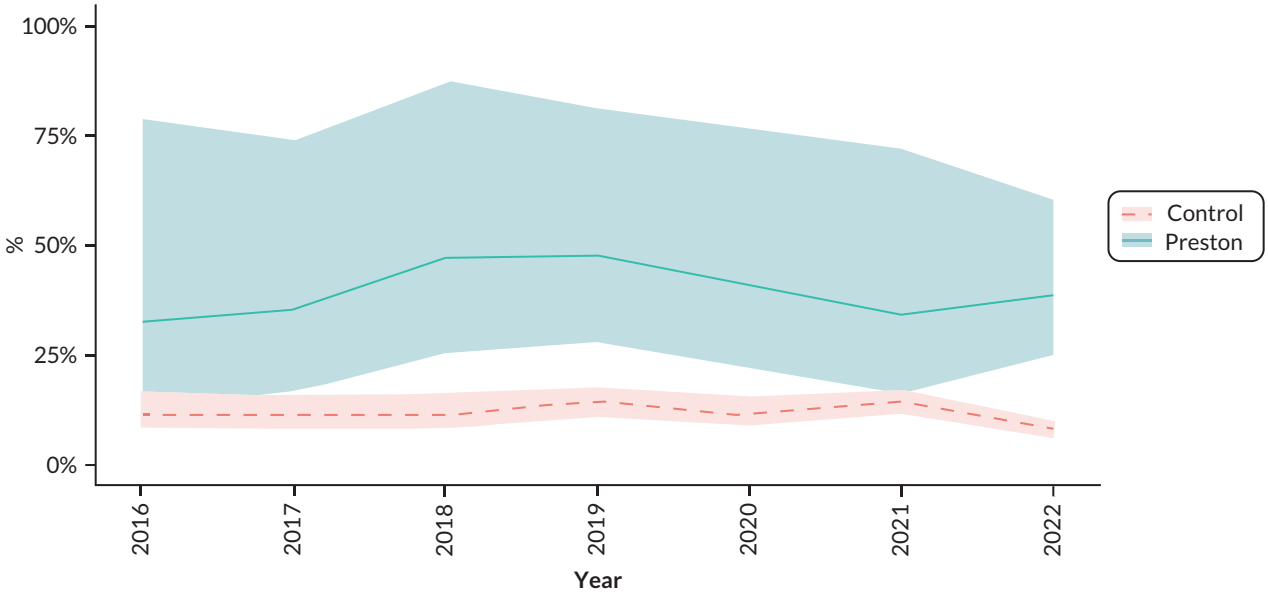

FIGURE 4 Trends from 2016 to 2022 percentage of spending by Preston City Council that was with local suppliers, compared to other similar lower-tier LAs. Shaded areas around the lines represent the 95% CIs.

TABLE 3 Characteristics of local and non-local contracts in Preston, comparator LAs and other lower-tier LAs England

	Other lower-tier LAs			Comparator lower-tier LAs			Preston		
Local	**Non-local**	**Local**	**% diff**	**Non-local**	**Local**	**% diff**	**Non-local**	**Local**	**% diff**
Number of contracts	59,726	45,228		1706	448		28	10	
Mean award value (£000s)	274	188	−32	234	223	−5	502	203	−60
Mean award value per month (£000s)	30	19	−38	21	30	45	184	20	−89
Contract duration (months)	24	28	13	24	18	−22	29	27	−5
SME %	58	66	15	51	76	48	11	40	273
Mean supplier number of employees	1186	140	−88	1461	125	−91	1145	40	−96
Mean supplier turnover (million GBP)	102	15	−85	135	27	−80	167	4	−98
Mean supplier pre-tax profits (GBP)	9	1	−86	12	2	−85	8	0	−101
Mean supplier credit score (GBP)	72	59	−18	77	65	−15	83	72	−13

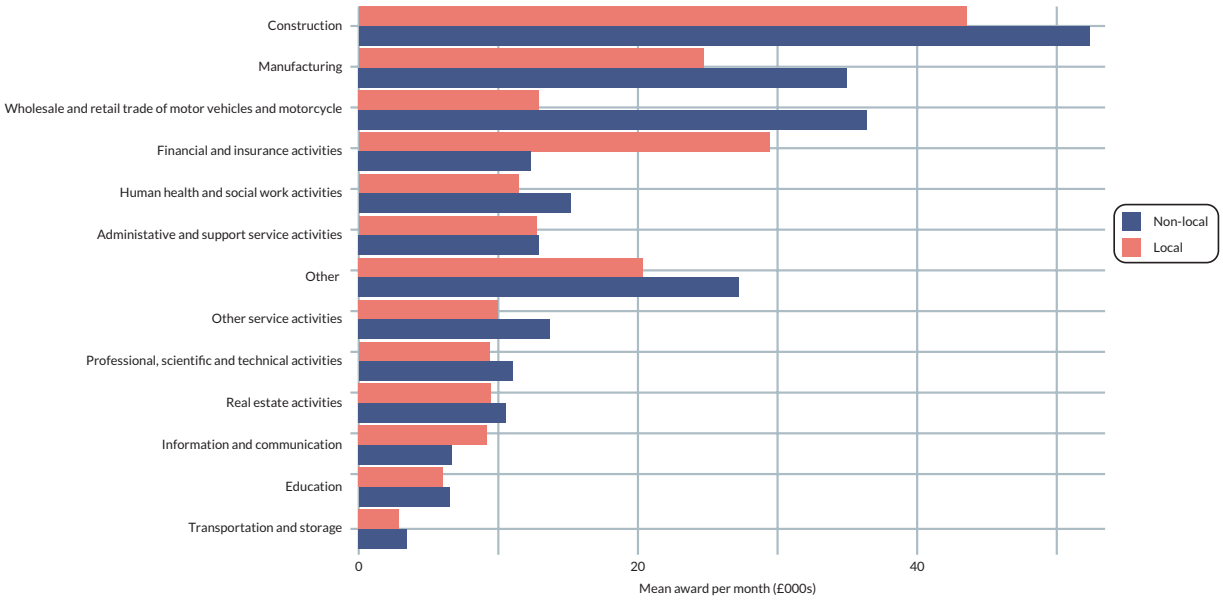

FIGURE 5 Average value per contract month for local and non-local contracts, by Standard Industrial Sector of all lower-tier LAs in England.

TABLE 4 Estimates from linear (ordinary least squares) regression and instrumental variable model showing association between local procurement (vs. non-local procurement) and contract value per month adjusting for supplier sector income deprivation, median wages, employment rate, population size, region and ONS rural–urban classification

Variable	Estimate
Ordinary least squares estimate	−0.10 (−0.22; 0.03)
Instrumental variable estimate	−0.07 (−4.1; 4.0)

instrumented the decision to award a contract locally or not using the percentage of invoices paid by the contracting authority to local suppliers in the year before a contract is awarded. Both of these show similar results, indicating that endogeneity may not be a major issue. Both indicate that, on average, there was no marked difference in cost of contract per month between local and non-local suppliers once supplier sector and local economic characteristics are accounted for.

Table 5 shows results from the linear fixed-effects regression models of the association between changes in local spending per capita across all lower-tier LAs in England and changes in employment and wages within these LAs. The results indicate that for every additional £100 per capita increase in local spending by LAs, the employment rate would be expected to increase by an additional 0.2% [95% CI (0.05% to 0.38%)]. Increasing trends in local spending per capita were associated with increasing trends in wages; however, the association for median wages did not reach statistical significance at the 5% level. For wages at the 20th percentile, for every additional £100 per capita increase in local spending, wages would be expected to increase by £0.9 per week [95% CI (0.15 to 1.67)].

Understanding the mechanisms of change

Interviews and workshops with stakeholders revealed optimism about the potential of CWB to address Preston's health inequalities. Participants particularly emphasised the importance of economic and community pathways for realising these health benefits. The economic pathway emerged as the most prominent, with participants noting the importance of adapting contractual and procurement processes to favour local suppliers and promote social value. This approach could foster fair employment practices, better pay through the living wage, and educational and employment opportunities via pre-employment programmes, apprenticeships or training opportunities negotiated in contracts. Making the city more attractive to live and work in might also prevent the outward migration of working-age adults to nearby cities.

Emphasis on anchor institutions and procurement policies

Participants from major anchor organisations highlighted the principles of CWB as outlined by CLES, particularly the use of procurement policies. These institutions have supported changes in procurement practices, forming networks that enable and reinforce these changes. Although NHS organisations were initially slow to adapt their procurement practices, engagement in the anchor institution network in Preston led to the development of a new NHS framework for commissioning social value. For some in these institutions, procurement for social value and CWB were largely synonymous.

Concerns about inequality and marginalisation

Despite the optimism, there was some scepticism about who might benefit from these economic impacts. Participants highlighted the risk of widening inequalities if some groups were more able to take advantage of the opportunities CWB offers. Criticisms included concerns about the perceived lack of reach, particularly regarding marginalised communities in a context of widespread austerity and deprivation.

Community empowerment and health

Another major pathway to health discussed was community empowerment, leading to improved mental health and agency. CWB was seen as having the potential to promote a sense of pride and ownership, offering marginalised groups some control over their future. Participants believed that local partnerships built around CWB and social value could eventually have a very positive impact on health inequalities and healthcare provision, both physical and mental. However, this optimism was tempered by observations that grassroots community involvement in key processes in Preston has been limited. Policies have thus far been administered in a top-down fashion by anchor institutions and professional experts, with limited opportunities for grassroots influence from smaller organisations, citizens or neighbourhoods. Participants within anchor institutions also acknowledged the top-down nature of implementation, but some justified this on the basis of urgency and reliance on policy-driven

TABLE 5 Additional effect on employment rate and wages associated with every £100 per capita increase in local spending

Outcome	Coefficient	95% CI	*p*
Employment rate of 16- to 64-year-olds (%)	0.21	(0.05 to 0.38)	0.01
Median wages (£/week)	0.78	(−0.41 to 1.98)	0.20
Wages at 20th percentile (£/week)	0.91	(0.15 to 1.67)	0.02

knowledge and expertise to get procurement changes embedded. These participants felt that enhanced public involvement could follow.

Perceived democratic deficit and barriers to engagement:

Many community participants and those working for smaller Voluntary, Community, Faith, and Social Enterprise (VCFSE) organisations felt that they were not directly engaged in the decision-making of anchor institutions. This led to criticisms that the political capital and positive public relations from the Preston Model benefited larger anchors more than smaller organisations. Some VCFSE organisations felt that their experiential knowledge of the communities they serve was underutilised. The perceived democratic deficit of CWB in Preston was noted and contrasted with the more notable successes of procurement in the Preston model.

Challenges of language and sustainability

Participants highlighted the language and terminology of CWB as a barrier to greater community involvement. Jargon could be off-putting and confusing without efforts to promote understanding or involvement. Even those actively engaged in CWB found some aspects of the model difficult to understand or explain. For some, the political presentation of CWB was motivating, while for others, it was seen as divisive and alienating.

Risks to sustainability and future directions

The lack of broad public involvement in CWB in Preston was seen by some as a risk to sustainability. Some participants felt that the initiative relied on a small number of committed leaders, particularly in Preston City Council and other key anchor organisations. The concern was that changes in personnel, administration or governance could destabilise progress. Others felt that key principles and practices were now sufficiently embedded to withstand such threats. Overall, participants emphasised that future innovations should aim to shift the balance toward bottom-up civic engagement, tapping into the collective creative and relational strengths of residents and communities.

Discussion and interpretation

We found that, in Preston, the introduction of CWB after 2015 was associated with improvements in employment and wages as well as a greater growth in the non-profit sector compared to what would have been expected in the absence of this intervention. These appear to have also led to improvements in mental health and life satisfaction when compared to the counterfactual. These economic improvements tended to be greatest among the more disadvantaged groups in Preston, reducing inequalities. Wages improved most for those under the 20th percentile of the national distribution and employment improved more for minority ethnic groups and people with existing health problems. Procurement for social value was a key CWB policy introduced during this time and the one that was emphasised in interviews with stakeholders. We examined the procurement practice of Preston City Council, one of these anchor institutions and the institution that has led the CWB programme in Preston. We found that its procurement practice was markedly different from other district councils – with Preston City Council being much more likely to procure services from local suppliers. Local contracts awarded by Preston City Council tended to be smaller and were more likely to be with SMEs and not-for-profit organisations when compared to those awarded to suppliers outside Preston and Lancashire. Reviewing contracts issued by district councils across England, we found no evidence that procuring locally increased costs, suggesting that there is not a large additional cost to anchor institutions from policies that promote procurement from the local suppliers, where these are available. Using estimates from district councils across England, we find that greater local procurement does seem to increase the local employment and wages at the 20th percentile. The England-wide effects are, however, relatively small and would not explain all of the increase in wages we observed in Preston. For example, our England-wide estimates suggest that the additional £74M spent in Preston from 2012 to 2017, as a result of changes in procurement practices,[23] would have led to an increase in weekly wages of around £4.50 per week for those below the 20th percentile and a one percentage point increase in the employment rate. Our estimates of the increase in wages at the 20th percentile and the employment rate in Preston, following the introduction of CWB, were much higher than this was (£35 per week and 4 percentage points, respectively). This could be because the local procurement practice by anchor institutions had a greater effect on employment and wages in Preston than our estimates based on the average effect for all district councils in England. Alternatively, other policies such as widespread introduction of the living wage by employers may also explain some of the increase in wages.

Our qualitative evidence highlighted key pathways and limitations in the approach taken in Preston. Specifically, there were two important pathways for health impact of CWB: the economic pathway and the community

pathway. The economic pathway was the most developed during this period (up to 2019) particularly in relation to procurement policy, while the community pathway had been underdeveloped. Lack of widespread public involvement and engagement with smaller VCFSE organisations has limited the extent to which CWB in Preston has improved mental health through providing a greater sense of agency, pride and ownership. Future development should aim to shift the balance toward bottom-up civic engagement, which will help enhance the sustainability of the approach.

There are several strengths, limitations and challenges from this work. We have synthesised evidence from multiple sources, finding consistent evidence that the introduction of CWB was associated with improved economic, health and well-being indicators and that the changes in procurement practice played an important part in contributing to that. While the economy in Preston did improve during this time period relative to other similar areas, and these changes did reduce inequalities within Preston and were associated with reduced mental health problems, it is harder to determine which specific policies led to these changes. CWB itself is not a discrete set of policies, but rather a set of principles, so it is not always clear which actions are part of CWB and which may have happened anyway in the absence of this strategy. For example, there may have been other economic changes in Preston during this time that have contributed to these improvements, such as the University of Central Lancashire (UCLAN) investment of £200M for its Preston campus in 2015. However, as UCLAN is one of the anchor institutions involved in the CWB programme, its adoption of a social value framework for this investment may have enhanced its beneficial impact on the economy and well-being.

Our analysis suggests that changes in procurement are potentially an important component of CWB and can have real impacts on the economy in a relative short term that are likely to have health benefits. Further data would have enabled us to derive a greater understanding of this process. We were limited by only having data on procurement by LAs and limited information on contracts. Having detailed information on contracts from across anchor institutions, including the outputs from those contracts, and details of suppliers (e.g. wages paid and where their employers are recruited from) would enable better estimates of the impacts of those contracts on the local economy and their value for money. While our analysis shows that local and non-local contracts awarded by LAs in the same sectors tend to have similar costs, this does not tell us whether they were a similar value for money.

Our qualitative investigation focused largely on stakeholders within anchor institutions and the VCSFE sector and included less detailed data collection from the wider public. This was partly due to the constraints of conducting research during the coronavirus disease discovered in 2019 pandemic and also due to the pragmatic and methodological constraints on how to best use qualitative methods to investigate diffuse economic mechanisms. Our analysis suggests that the impact from CWB during this time was partly through widespread changes in employment and wage levels. These changes affect large numbers of people, who are unlikely to attribute those changes to economic policies; it is therefore a challenge to investigate these mechanisms through qualitative methods.

Ours is, however, the first study to our knowledge that has brought together detailed analysis of the impact of a local economic strategy in the UK on health outcomes. It highlights several key findings:

- Local economic strategies such as CWB can have a real impact on health outcomes within a relatively short time period.
- Procurement policies are potentially an important mechanism that can help bring about beneficial economic change in relatively disadvantaged places such as Preston.
- Bringing together networks of anchor institutions and providing a structured approach, that involves reviewing current practice and reorientating on a large scale towards procuring for social value, is likely to be effective in bringing about these economic changes.
- Local economic growth that disproportionately benefits more disadvantaged groups, that is, people on low incomes and those with existing health problems, is more likely to lead to population health benefits.
- CWB strategies have the potential to have greater health and well-being benefits and be more sustainable if they to shift the balance toward bottom-up civic engagement, building on the collective strengths of residents and communities.

Patient and public involvement

In this project, our public involvement drew upon the Comensus initiative at UCLAN in Preston. At present, Comensus has over a 100 individual members and liaise with scores of local groups and organisations. Throughout the course of our CWB project, we drew on Comensus for input, support and liaison in a number of ways. First, we attended routinely organised meetings of Comensus

members (meeting bimonthly) and the Comensus strategic group (meeting quarterly) to inform relevant public and community individuals about the research and seek views. Early in the project, this involved letting people know about the focus of our study, our intended methods and seeking advice on practicalities (such as recruitment into the qualitative work package). Later, we reported on emergent findings and sought views. Towards the end of the project, we have facilitated discussions around future interests and opportunities for more general involvement in CWB beyond the scope of our study. In this first avenue of engagement, the deliberative fora available to us via Comensus provided a ready-made means for regular, ongoing consultative relations. Second, with the help of Comensus, we have organised a number of bespoke workshop style events to involve participating service users, carers, members of the public and representatives of established community groups in our CWB study. Besides Comensus members and affiliates, we also invited public advisors from the National Institute for Health and Care Research Applied Research Collaboration North West Coast and other citizens to these events. It was in these meetings that more active public participation was organised. Typically, we would have around 20–30 people present, spending a half day on activities designed to inform, listen and foster critical thinking about our study. We have held two such meetings, the first framed by intentions and shaping the project going forward, for example, thinking through possible mechanisms for translating economic justice into health benefits; the second, at the time, we had emergent qualitative findings and were looking to develop further insights and critical thinking on these. We have one more engagement event planned to disseminate the full findings and seek further views. We will also be inviting some of the key architects and protagonists of CWB, so the public participants have a means to sustain influence and seek further involvement.

To some extent, dialogue and discussions within these public engagement events mirrored certain key findings of the study, notably that public and community knowledge of CWB can be lacking, and there is a thirst for greater involvement, once people appreciate what is at stake. For some individuals, we had to spend time in our public and community engagement work explaining some of the detail of CWB to enable people to engage meaningfully with these ideas and form their views. Community participants who did have prior knowledge of the approach were also helpful in developing collective understanding. Once informed, the public and community participants were typically enthusiastic and appreciative, especially giving voice to a sense of pride that this initiative was, to some extent exceptional, compared to other places, happening in their city and neighbourhoods. That said, there was also some understandable cynicism that many local citizens are unaware of the details of how CWB is being implemented.

Equality, diversity and inclusion

The studies outlined have investigated inequalities in impact in relation to ethnicity, socioeconomic deprivation and disability. Understanding differences in economic and health impacts across these equity dimensions was central to analysis plans from the outset. The Health Inequalities Assessment Tool (https://forequity.uk/hiat/)[49] was used to inform the analysis plans of each study to support this. The studies have important implications for policies that aim to tackle health inequalities, indicating that the CWB approach in Preston has important differential impacts across multiple equality, diversity and inclusion dimensions. Recruitment of participants on the qualitative work package and public involvement sought to ensure representation across a diverse background.

Impact and learning

The learning from this research comes at an important time for informing policy. Many places across the UK are developing and implementing CWB strategies. For example, the Scottish government has developed a CWB strategy[50] as a key part of their National Strategy for Economic Transformation.[51] The Government of Wales has developed a procurement framework focusing on the retention and use of local wealth,[52] and CLES are partnering with the Welsh Government to support anchor institutions in selected Public Services Board areas to explore CWB approaches, with a focus on progressive procurement. CLES is also working with > 15 LAs across England and Scotland to support local CWB strategies. The NHS has now recognised that, as a major anchor institution, it has a role in CWB establishing the Health Anchors Learning Network.[53] This movement is part of a wider approach being taken by many national and local governments to deliver economic change that is more inclusive and promotes sustainability and well-being, often referred to as ‘the well-being economy’. Internationally, alongside Scotland and Wales, the Wellbeing Economy Alliance, is working with Finland, Iceland, Canada and New Zealand to support them in delivering on their well-being economy objectives.[54] The World Health Organization (WHO) has recently launched its Wellbeing Economy Initiative, supporting member states to build the commitment for a well-being economy approach.[55] CWB is a practical

approach to local economic development that supports the delivery of a well-being economy.

This national and international approach has been developing rapidly in recent years. There is, however, a lack of evidence indicating which forms of economic change and which components of CWB are most effective for improving health and well-being and reducing inequalities in health. The evidence from this research therefore provides crucial evidence to inform that debate. Initial findings have been widely disseminated through workshops and conferences,[56] articles in professional and local media,[57–60] policy briefings and as a case study for the WHO Wellbeing Economy Initiative.[55,61] The recognition from our research that a CWB approach can have an impact on health outcomes over a relatively short time period has provided impetus for action, particularly in the health sector.[62] A focus on progressive procurement is often a first and practical step that can be taken by anchor institutions. Our evidence showing that this does have real economic impacts that disproportionately benefits more disadvantaged groups without incurring additional costs provides a justification for expanding this practice. The experience of progressive procurement in Preston alongside our evidence indicates potentially important components of approaches that aim to promote progressive procurement – particularly the need for ongoing measurement and monitoring of procurement. Where is money spent? What is the added social value of that investment and how does that change over time? Changing procurement practice takes time and needs to be supported by networks of anchor institutions that can share learning, working in partnership with local employers, SMEs and VCFSE organisations.

Our evidence indicates some of the important characteristics of economic change that are likely to have health and well-being benefits. Not all economic developments are good for health. What matters is – who gains from the economic growth. This may seem obvious, but it is not always recognised in economic policy. The kind of growth we saw in Preston from 2015 to 2019 benefitted those on low wages, those with disabilities and minority ethnic groups the most. This provides an exemplar of the types of economic development needed for a well-being economy. It also demonstrates that it is possible to monitor progress on the scale of a small city, suggesting some of the metrics that should be used to do this by places implementing CWB. Our finding of the challenges and limitations of wider community involvement in CWB in Preston has important implications for CWB strategies and other strategies that aim to promote community-led change in relatively disadvantaged places. While the evidence from Preston indicates that anchor-led changes can have health benefits even without deep community involvement, a more bottom-up approach could potentially have greater benefits and be more sustainable. Previous work on community empowerment initiatives highlights the need for both greater community control *and* a shift in investment and wealth.[63] The most effective approach is likely to be one that involves a shift in progressive procurement alongside support and commitment to community-led approaches that can take advantage of those changes in procurement practices.

We are continuing to work locally, nationally and internationally to support the use of this evidence in a changing practice. CLES as a partner in this research is developing a briefing, outlining the practical implications of the findings for CWB practitioners it is working with in LAs, anchor institutions, combined authorities and national governments. As a WHO Collaborating Centre, we will be using this evidence in the WHO EURO well-being economy initiative to show the cobenefits for achieving sustainable growth and development. This will shape how national and local governments and authorities generate new revenue and redirect existing spend into heath, equity and well-being policies and interventions.

Implications for decision-makers

Our evidence suggests that the kind of CWB policies implemented in Preston during the study period, such as progressive procurement and living wage policies, can help improve mental health and economic inclusion. Policies should be introduced to support the extension of these approaches, including:

A long-term fair funding settlement for local government

This needs to take account of spending needs and revenue raising powers and would allow local governments to plan long-term procurement for social value with local suppliers, alongside support to develop community-led suppliers where there are market gaps.

New powers for National Health Service organisations to shape local economies

The NHS in England spends around £6B on consumables annually,[64] producing 2.5 k tonnes of plastic waste every day.[65] The production, disposal and/or recycling of these items is often though the national NHS supply chain, with products shipped from overseas. The opportunity to support the growth of local supply chains is currently being missed. The Department of Health and NHS England

should work to enable NHS Supply Chain to incorporate social value objectives that recognise their potential local impact and potential for long-term development of local suppliers. NHS England should clarify its new objectives for Integrated Care Systems, including a commitment to supporting health promoting economic development.

A Community Wealth Building act

An act to enshrine the five principles of CWB in law, requiring all public bodies to operate in the pursuit of the economic, social, environmental and cultural well-being of current and future generations, and to report on relevant actions, including progressive procurement policies. The Scottish Parliament is already proposing to bring forward legislation for such a CWB Bill.

Transparent procurement reporting

Our evidence highlights the need for comparative data on procurement practices to inform and evaluate progressive procurement strategies. All public bodies, including public universities, should be required to publish procurement data in a standardised format using Open Data standards,[66] including information relevant to the social value of suppliers.

Develop local Community Wealth Building metrics and provide tools and expertise for places to use these in developing and monitoring their Community Wealth Building strategies

This should include-LA level measures of procurement (percentage spend by local bodies with local suppliers), wage inequality, income inequality and employment by equality groups (disability, ethnicity, gender and education) as well as neighbourhood-level measures of mental health and well-being (e.g. SAMHI).

Local places should develop CWB strategies in partnership with their communities that involve a large-scale shift in procurement to promote social value, and improvements in employment conditions, alongside support and commitment to community-led approaches that can take advantage of those changes in procurement practices.

Research recommendations

Our research has identified several gaps in the evidence base. While we find some evidence for the health and economic effects of progressive procurement, there is very limited evidence to understand the potential for leverage of procurement for health and well-being impact and how this differs by sector, and particularly the opportunities within the health sector. More broadly, while our evidence indicating that CWB that leads to more equitable economic growth and appears to be health-promoting, it remains unclear as to whether growth in some sectors is likely to be more health-promoting than other sectors. One of the interventions that was part of the CWB strategy in Preston during this time was the promotion of the Living Wage by employers. We were not, however, able to investigate this policy specifically; further research is needed to investigate the health benefits of voluntary programmes to promote wage increases for low-paid employees. We highlight that CWB in Preston in the early stages had limited wider community involvement; however, previous research suggests that a more community-led approach could have wider benefits.[63] Research is needed to understand how best to develop these approaches.

We therefore make the following recommendations:

Research is needed to:

- Understand the best approaches for utilising NHS procurement to influence local economies to promote economic inclusion and health. This needs to take account of the costs and benefits of such approaches, including any impact on the costs and benefits of direct provision of health care and wider benefits from impacts on the local economy.
- Understand how the health impact of economic development varies for across different sectors. This evidence can be used to inform local economic strategies that aim to promote growth in certain sectors.
- Understand the effectiveness of local interventions to encourage employers to increase wages for those on low pay, in terms of both wages and health outcomes.
- Understand the best approaches for promoting community-led approaches for developing enterprises that are more accountable to local populations and employees, such as co-operatives, and the health benefits of such approaches. This could include investigating new approaches to partnerships between anchor institutions and community enterprises to grow activity in areas of need, understanding the health benefits for the employees of these enterprises and the health impacts of the services they provide, relative to other approaches.

Conclusions

The introduction of CWB in Preston was associated with improvements in mental health, life satisfaction, wages, employment and a growth in non-profit enterprises. Economic and, to some extent, health improvements tended to be greatest among more disadvantaged groups in

Preston. Procurement for social value was a key CWB policy introduced during this time as highlighted in interviews with stakeholders. Preston City Council, one of these anchor institutions in Preston, was found to be much more likely to procure services from local suppliers compared to other district councils in England, and these contracts with local suppliers tended to be with smaller employers and not-for-profit organisations. We found no evidence that procuring locally increased costs; but, across England, local procurement by district councils was associated with increased local employment and wages. Widespread public involvement in CWB and engagement with some smaller VCFSE organisations in Preston was limited.

Approaches to CWB that use progressive procurement by anchor institutions alongside other measures, such as adoption of the living wage, can lead to economic benefits that disproportionately benefit disadvantaged groups, leading to improved mental health and well-being. This approach could potentially lead to greater benefits if developed in closer partnership with the public and community groups.

Additional information

CRediT contribution statement

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Other contribution

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Data-sharing statement

The quantitative analysis in this research largely used publicly available data, which are available from the ONS (www.ons.gov.uk/datasets/wellbeing-local-authority/editions/time-series/versions/4, www.nomisweb.co.uk). Analysis of procurement used data that are publicly available but compiled by Tussell Ltd. (www.tussell.com/). Data on the SAMHI is available from the Place-based Longitudinal Data Resource (PLDR) (https://pldr.org/dataset/2noyv/small-area-mentalhealth-index-samhi). New indicators derived from these data for this research will be published as Open Data on the PLDR. Annual Population Survey Data were used under licence from the UK Data Service (UKDS) Secure Datta Access Service and are available to researchers via application to the UKDS. Qualitative data collected in the research are potentially disclosive and are held by UCLAN and will be held for 3 years before being destroyed as per the requirements of the Ethics Committee.

Ethics statement

Ethical approval was gained from the University of Central Lancashire Health Ethics Review Panel in November 2021 (Reference: HEALTH-0245-FR).

Information governance statement

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Award publications

This synopsis provided an overview of the research award *The health and health inequalities impact of a place-based community wealth Initiative*.

Other articles published as part of this thread are:

Rose TC, Daras K, Manley J, McKeown M, Halliday E, Goodwin TL, *et al*. The mental health and wellbeing impact of a Community Wealth Building Programme in England: a difference-in-differences study. *Lancet Public Health* 2023;**8**:e403–10. https://doi.org/10.1016/S2468-2667(23)00059-2

Rose TC, Daras K, McKeown M, Goodwin TL, Manley J, Barr B. Understanding the differential effects on employment of a Community Wealth Building Programme in England: a difference-in-differences study. *J Epidemiol Community Health* 2025;**79**:658–63. https://doi.org/10.1136/jech-2024-223499.

For more information about this research please view the award page (www.fundingawards.nihr.ac.uk/award/NIHR130808).

Additional outputs

The following were still under review when this synopsis was published. The following preprint versions are available for the reader; please be aware these may not have been peer reviewed:

Rose TC, Daras K, Goodwin TL, Hollingsworth B, Manley J, Mckeown M, Barr B. Relationships between local public spending, employment and wages within local authorities in England: a longitudinal ecological analysis. [version 1; peer review: awaiting peer review]. *NIHR Open Res* 2025;**5**:89 https://doi.org/10.3310/nihropenres.14069.1

Ahmed R, Rose TC, Hollingsworth B, O'Sullivan V, Barr B. Local government procurement costs and Community Wealth Building initiatives in England. *Ann Public Coop Econ* 2026. https://doi.org/10.1111/apce.70028

Halliday E, Prinos I, Manley J, McKeown M, Goodwin TL, Barr B. How could Community Wealth Building address health inequalities? A qualitative study of stakeholder perspectives. *SSRN* 2025. https://doi.org/10.2139/ssrn.5378105

Mckeown M, Manley J, Prinos I, Halliday E, Lloyd Goodwin T, Rose TC, *et al*. The organisational mainstreaming of Community Wealth Building. *SSRN* 2024. https://doi.org/10.2139/ssrn.4900630

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Glossary

Anchor institutions Large public or not-for-profit organisations (e.g. NHS, universities and local authorities) that are rooted in a locality and play a key role in local economic development.

Annual Population Survey A survey providing data on employment, wages, and life satisfaction.

Average daily quantity A measure of antidepressant prescribing.

Centre for Local Economic Strategies An organisation supporting local economic development and Community Wealth Building.

Community Wealth Building An economic strategy that aims to reduce inequalities by redirecting wealth back into the local economy, increasing community control and promoting local economic development.

Coronavirus disease 2019 The pandemic that affected data collection and outcomes during the study period.

Difference-in-differences analysis A statistical method used to compare changes in outcomes between an intervention group and a control group over time.

Living Wage A minimum wage standard set by the Living Wage Foundation, aimed at ensuring workers earn enough to meet their basic needs.

Local authority A local government body responsible for services within a specific area.

Lower Super Output Area A geographic area used for statistical analysis in England.

Nomenclature of Territorial Units for Statistics 2 A regional classification system used in the European Union.

Office for National Statistics The UK's national statistical institute.

Place-based Longitudinal Data Resource A data portal for accessing place-based health and economic data.

Progressive procurement A procurement strategy that prioritises local suppliers and social value, aiming to support local economies and reduce inequalities.

Quality-adjusted life-year A measure of disease burden, including both quality and quantity of life.

Small Area Mental Health Index A composite measure of population mental health at the local level.

Small- or medium-sized enterprise Businesses with fewer than 250 employees.

Social value The additional social, economic and environmental benefits that can be achieved through procurement and contracting processes.

Synthetic control method A statistical technique used to estimate the impact of an intervention by creating a weighted combination of control areas that mimic the intervention area before the intervention.

University of Central Lancashire A university involved in the research.

United Kingdom Data Service A service providing access to UK social and economic data.

Voluntary, Community, Faith, and Social Enterprise Organisations that operate in the non-profit sector.

World Health Organization A global health agency.

List of abbreviations

ADQ	average daily quantity
APS	Annual Population Survey

CLES	Centre for Local Economic Strategies
CWB	Community Wealth Building
LA	local authority
LSOA	Lower Super Output Area
NUTS2	Nomenclature of Territorial Units for Statistics 2
ONS	Office for National Statistics
SAMHI	Small Area Mental Health Index
SME	small- or medium-sized enterprise
UCLAN	University of Central Lancashire
VCFSE	Voluntary, Community, Faith, and Social Enterprise
WHO	World Health Organization

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Appendix 1 Trends from 2011 to 2019 in antidepressants, diagnoses of depression and mental health-related hospital attendances in Preston and the control areas before and after the intervention

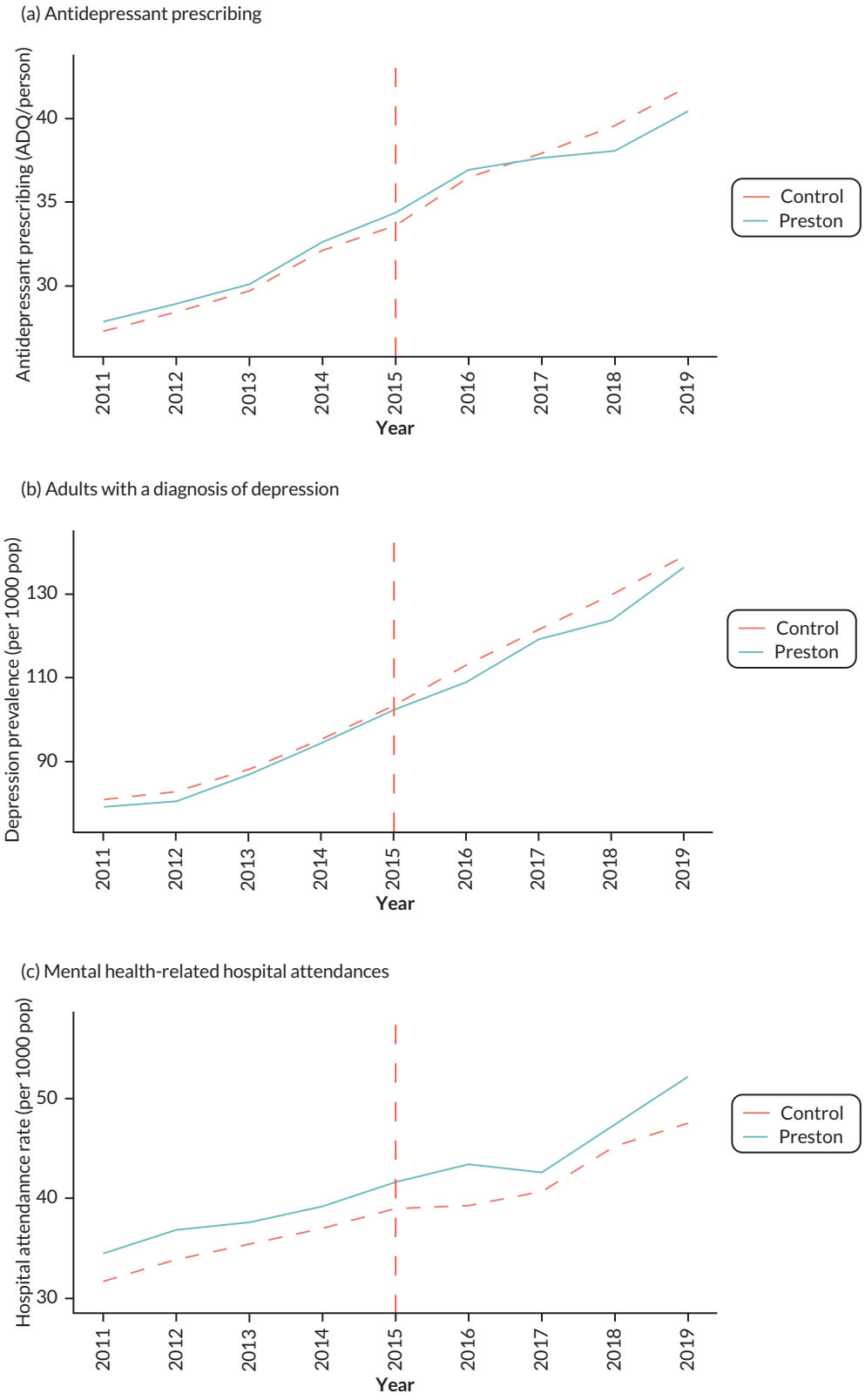

FIGURE 6 Trends from 2011 to 2019 in antidepressants, diagnoses of depression and mental health related hospital attendances in Preston and the control areas before and after the intervention. Shaded areas around the lines represent the 95% CIs.